Ke Ku'una Na'au: A Native Hawaiian Behavioral Health Initiative at The Queen's Medical Center

Jaclyn Kanilehua Kim MSW, LSW; Lisa Garrett MSN, APRN RX, FNP-BC; Renee Latimer APRN-BC, MS, MPH; Laura Kau'ionalani Nishizaki LSW; Jo Ann Kimura MSW; Deborah Taira ScD; and Tetine Sentell PhD

Abstract

Although acute care facilities have not typically focused on resolving the psychosocial determinants of health, new models are emerging. This article provides details of the Ke Ku'una Na'au (KKN) Native Hawaiian Behavioral Health Initiative implemented in 2016 at The Queen's Medical Center in Honolulu, Hawai'i. The program is focused on reducing hospital readmissions for socially and economically vulnerable Native Hawaiian adults and improving their health care outcomes after hospitalization. The program was piloted on 2 medical units to assist patients who identified as Native Hawaiian, were ages 18 and older, and living with chronic diseases, psychosocial needs, and/or behavioral health problems. The program model was developed using a team of Native Hawaiian community health workers referred to as navigators, who were supported by an advanced practice nurse and a project coordinator/social worker. Navigators met patients during their inpatient stay and then followed patients post discharge to support them across any array of interpersonal needs for at least 30 days post-discharge. Goals were to assist patients with attending a post-hospital follow-up appointment, facilitate implementation of the discharge plan, and address social determinants of health that were impacting access to care. In 2017, 338 patients received care from the KKN program, a number that has grown since that time. In 2015, the baseline readmission rate for Native Hawaiians on the 2 medical units was 16.6% (for 440 Native Hawaiian patients in total). In 2017, the readmission rate for Native Hawaiians patients on the two medical units was 12.6% (for 445 Native Hawaiian patients, inclusive of KKN patients) (P=.092). This decrease suggests that the KKN program has been successful at reducing readmissions for vulnerable patients and, thus, improving care for Native Hawaiians in the health system generally. The KKN program has offered relevant, culturally sensitive care meeting a complex, personalized array of needs for over 338 patients and has shown demonstrated success in its outcomes. This information will be useful to other acute care organizations considering similar programs.

Keywords

patient navigators, Native Hawaiian, health care system, hospital

Abbreviations

APRN = advanced practice nurse

CMS = Centers for Medicare and Medicaid Services

DRGs = diagnosis-related groups

ED = emergency department

FQCHC = federally qualified health centers

KKN = Ke Ku'una Na'au

NHHP = Native Hawaiian Health Program

P4 = Pauahi 4th floor medical unit

PTSD = post-traumatic stress disorder

PCP = primary care providers

QET9 = Queen Emma Tower 9th floor medical unit

QHS = Queen's Health System

QMC = Queen's Medical Center

SW = social worker

Highlights

- The Native Hawaiian value-based approach taken by Ke Ku'una Na'au is unique in acute care.
- The program supports psychosocially vulnerable Native Hawaiians after hospitalization.
- Non-clinical community health workers partner with patients in the acute care setting.
- Post-discharge, these community health workers remove resource barriers to impact gaps in care continuum.
- · After one year, readmission rates decreased.

Background

Because of payment penalties imposed on hospitals with high readmission rates by the Centers for Medicare and Medicaid Services (CMS), there is a growing interest in reducing unnecessary hospital readmissions. Such efforts can improve quality of care, reduce health disparities, and lower health care costs. Services with the cost of the costs of the costs of the costs of the costs.

The Queen's Health System's (QHS) mission calls for a special emphasis on the health and well-being of Native Hawaiians.⁴ In fiscal year 2015, Native Hawaiians under Queen's medicine clinical service line represented 21% of total readmissions in the QHS.⁵ The top 5 common readmission diagnosis-related groups (DRGs) for Native Hawaiians were psychosis, chemotherapy-related events, alcohol/drug abuse or dependence, sepsis, and cellulitis.⁵ These diagnoses are often accompanied by many co-morbidities and may be influenced by social determinants of health.⁶⁻⁷

Previous work in Hawai'i and elsewhere has found that social and behavioral vulnerabilities are related to preventable hospitalizations and readmissions. A qualitative study within The Queen's Medical Center (QMC), an entity of QHS, found that the precipitating factors for many preventable hospitalizations were psychosocial in nature. Factors included inadequate medication reconciliation (eg, not refilling medication, improper usage), logistical problems (eg, difficulty in getting to primary care follow-up visits), and individual challenges including lifestyle and self-care factors, such as homelessness, hygiene problems, and high-risk behaviors.

Although acute care facilities have not typically focused on addressing the social determinants of health, new models are needed.^{8,11-13} In December 2016, QMC implemented the *Ke Ku'una Na'au* (KKN) a Native Hawaiian Behavioral Health Initiative, which is focused on reducing hospital readmissions for socially-and economically-vulnerable Native Hawaiian adults. The phrase *Ke Ku'una Na'au* has many different meanings in the Hawaiian language. The translation the program chose to

utilize is "to put one's mind and heart at ease or to let down gently." The name helps to illustrate the traditional, Indigenous concepts of caregiving and shows the ethos of the program, which is built on strong relationships of trust and care. The program vision was to improve the healing of Native Hawaiian patients after discharge by using patient community navigation to bridge the transition from hospital to home by supporting patients in traversing the health care system and connecting with follow up medical care and support. This article describes the structure, history, and impact of the KKN initiative. A companion article in this issue discusses the program from the first-person perspective of the patient navigators.

Program Structure

The initial program structure included 4 Native Hawaiian community health workers called the navigators, who were supported by an advanced practice registered nurse (APRN) and a project coordinator/social worker (SW). The navigator team was expanded to 5 in December 2017. Navigators were non-clinical staff of the hospital who met patients during their inpatient stay and followed them post discharge to support an array of their needs.

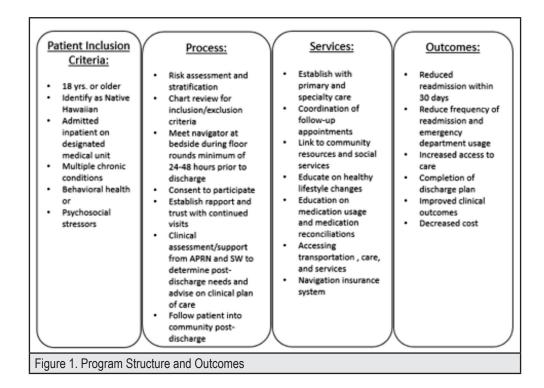
Patients were followed for a minimum of 30 days post-discharge. The program goals were for the navigators to coordinate and attend follow-up appointments in primary and specialty care, educate on healthy lifestyle changes, support medication use and medication reconciliation, help with accessing transportation, assist in negotiating insurance access, and provide linkages to community resources for an eventual handover of the patient to other community-based supportive services. Given the importance of primary care for patients with complex

health needs, a major objective of the project was to connect a discharging patient with an established or new primary care physician (PCP). Figure 1 summarizes eligibility, processes, services, and outcomes.

An established relationship between the navigator and the patient was a major component of KKN's Native Hawaiian values-based strategy. Starting with the initial visit at the bedside during the hospital stay, navigators built strong, trusting, nonjudgmental relationships. Navigators encouraged patients to focus on healing during their inpatient stay, knowing that after discharge the navigator would help them transition back into the community. No day-of-discharge referrals were allowed as it was critical for navigators to have at least 24 - 48 hours prior to discharge to meet the patient and form a relationship. The recommended approach was to refer a patient as soon as there was a sense they might benefit from post-discharge support, or to call for a consult to determine whether patient navigation services were appropriate.

Program History

The KKN program was funded by the Native Hawaiian Health Program (NHHP) at QHS. Deeply committed to the mission set forth by its founders Queen Emma and King Kamehameha IV to provide in perpetuity quality healthcare services to improve the health and well-being of Native Hawaiians and all of the people of Hawai'i, QHS started the NHHP in 2006. The NHHP was equipped with the vision to enhance the *ola pono* (health, well-being) of Native Hawaiians by elevating their overall health status to a level comparable with that of other ethnic groups in Hawai'i.



In August 2015, 2 nursing directors with clinical mental health experience met with the director of the NHHP to discuss the possibility of designing a project to address the increasing numbers of inpatient medical patients with psychosocial and/ or behavioral health issues who were returning to the hospital within 30 days. These nursing directors were encouraged to submit a grant to the NHHP to support a pilot project. Throughout the grant writing and submission process from August 2015 to February 2016, a small interdisciplinary team met monthly to develop the pilot intervention. The team considered metrics being tracked across the behavioral health and medicine service lines and reviewed literature. Data showed that 21% of patients in the medicine service line at QMC who were readmitted within fiscal year 2015 reported Native Hawaiian ethnicity. Therefore, 30-day readmission was selected as the outcome of interest. Project goals were:

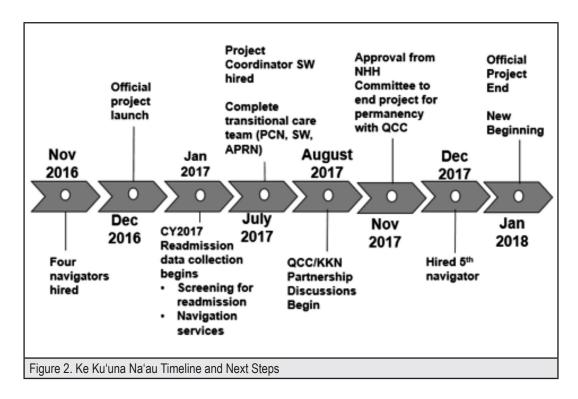
- 1. To significantly impact persistent, unmet healthcare needs in the Native Hawaiian community.
- 2. To reduce readmission rates and emergency department (ED) utilization among Native Hawaiian patients with medical and psychiatric co-morbidity, and improve their quality of life.

Much of the literature described successful interventions involving registered nurses (RN) or APRNs who followed patients post-discharge. ¹⁻² For this program, a decision was made to develop a para-professional patient community navigator role to support Native Hawaiian patients in their transition from the hospital to the community. Navigators were to be supported clinically by an APRN and a SW.

In February 2016, the Native Hawaiian Health Committee, which provides oversight to the NHHP and is comprised of the QHS Board of Trustees and senior leadership, unanimously approved 3 years of funding for this project. The team then piloted a readmission prevention intervention on 2 medical units to assist patients who identified as Native Hawaiian, were 18 years and older, and were living with chronic diseases, psychosocial needs, and/or behavioral health problems.

Program success was to be measured by outcome and process measures. Outcome measures included reducing 30-day readmissions, frequency of readmissions, and ED usage. Process measures included attending a follow-up appointment with PCP and completing a discharge plan. There was an expectation that this program would also provide cost savings and that a reduction in the readmission rate for the KKN program would drive a reduction in readmissions of Native Hawaiian patients overall in the health system.

Program funding was awarded during the first part of fiscal year 2017 (starting July 2016) and the first few months were spent managing logistical concerns (Figure 2). The initial navigators began training in November 2016. In January 2017, the navigators began officially assisting patients who were newly discharged. Services were piloted on 2 medical units, with the 4 patient navigators supported by an APRN who provided clinical support to navigators and holistic care to patients. In July 2017, a project coordinator/SW was hired to assist with program development and offer necessary support to the navigators and APRN on addressing psychosocial needs in a team-based approach. The team worked with providers at QMC and communicated in person and through the electronic medical record with these providers.



To continue the collaboration with the community, the navigation team including the APRN, as well as the nursing director visited each of the federally qualified health centers (FQHCs) to establish a working relationship that would foster seamless transition from the hospital setting to the community. The APRN and SW had experience working with medically underserved Native Hawaiians because both had previously worked at the largest FQHC in the state.

Changes in Readmission Rates

In 2017, 338 Native Hawaiian patients were screened at bedside and deemed eligible for care through the KKN program. The monthly 30-day readmission rates were calculated for the KKN patients (Figure 3). At the beginning of 2017, the rate of readmissions for patients in the KKN program was 21%. By December 2017, the KKN readmission rate was 12%, after a relatively steady downward trend. In January 2018, no Native Hawaiian patients from KKN were readmitted to the hospital, resulting in a 0% 30-day readmission rate for that month.

In 2015, before the KKN program began, the annual 30-day readmission rate for Native Hawaiian patients on the 2 medical units was 16.6% (n=440). In 2017, the annual 30-day readmission rate for Native Hawaiians on the 2 medical units was 12.6% (n= 445; this number includes the 338 KKN patients and the other 7 Native Hawaiian patients admitted to the two medical units during that time) (P=.092). This decrease suggests that the KKN program is successful at reducing readmissions for vulnerable patients on the 2 medical units, thus, improving care for Native Hawaiians at QMC generally. This is a highly

relevant outcome for QMC, which had as a goal for the KKN program of a reduction in readmission rates for Native Hawaiian patients on the 2 medical units.

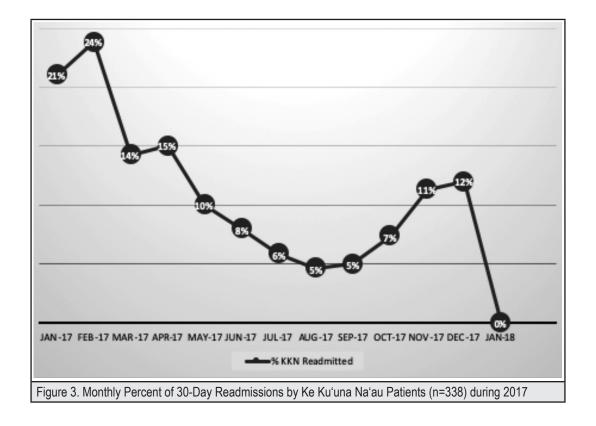
Patient Stories

A unique and powerful way to see how KKN has been effective in the lives of patients is through their stories. Although each KKN patient has his or hers own set of distinct challenges, 3 key themes emerged in considering the impact of KKN on patients: (1) removing barriers to community resources, (2) building relationships and trust, and (3) employing Native Hawaiian values in practice.

Theme #1 – Removing Barriers to Resources

One patient with an extensive list of co-morbidities related to obesity experienced 3 hospital admissions and 1 ED visit in 1 month. He entered the KKN program during his second hospital admission. At the time of this admission, he was homeless and living in constant pain in his vehicle after being evicted for failure to pay housing fees. He was receiving no public assistance and had no relationship with a PCP, social services, or a homeless outreach team, and had a strained relationship with his inpatient providers.

The KKN navigator met the patient at bedside and assisted the family with obtaining food stamps while the patient was hospitalized. The navigator also assisted the patient in obtaining official documents and setting up transportation for all necessary follow-up appointments. The navigator referred the patient to a FQHC where the patient was able to receive primary care



with the navigator present for support. The FQHC provided additional support services to address other social issues. The navigator supported the patient and the family in securing a new apartment, moving, and obtaining furniture and other necessary supplies. The navigator also provided life skills training, such as grocery shopping. The patient has had no ED visits or hospital admissions at QMC since-graduation from the KKN program.

Theme #2 - Building Relationships and Earning Trust

Another patient was a male in his 30s and a decorated veteran who had returned from active duty with post-traumatic stress disorder (PTSD) for which he never received treatment. He was admitted to QMC after a suicide attempt. The navigator visited the patient during his admission and became a trusted confidante of the patient and his family. The patient had no prior relationship with a PCP at his preferred facility. The navigator assured the family help with establishing connections to appropriate support services to address needs. The navigator facilitated linkage to the patient's preferred facility and organized and scheduled all necessary appointments with follow-up and specialty care. The navigator also assisted the patient in navigating through a complex insurance system to ensure the patient obtained support for payment of hospital fees. Throughout the process, the navigator encouraged positive goal setting, and the patient maintained weekly check-ins.

After graduation from the KKN program, the navigator maintained contact with the family and had the privilege of seeing the patient continuing to pursue his goal of returning to school to obtain his bachelor's degree. At his graduation, as the keynote speaker, the patient shared his story of success in overcoming challenges. He invited his navigator to his graduation and credited her in his testimonial as a huge part of his success, thanking her for her dedication and aloha. In a later interview, he stated, "If it wasn't for her and Queen's, I might not be alive today to see my children." The patient is now enrolled in a master's degree program.

Theme #3 - Native Hawaiian Value-Based Approach

An elderly, widowed female who lived alone and had no history of psychiatric conditions came to the QMC Emergency Departmentf with abdominal pain. She was transferred to another medical facility for care but returned to QMC reporting suicidal ideation after discovering she would be evicted from her rental unit which she had lived in for many years. She was terrified at the prospect of becoming homeless and of not having the skills or resourcefulness to survive on the street. While in the ED, she denied all offers of temporary housing out of concern that she would not be able to keep her belongings. She was eventually admitted to the adult psychiatric unit where she began refusing treatment. The patient was referred to the KKN program and was visited by a navigator who used traditional values to connect with her and gain her trust by treating her in a familial way, referring to her as "Aunty," and speaking to her in her native tongue. The navigator remained with her during her hospitalization and promised to support her after discharge as well. The navigator was successful in encouraging compliance with treatment whereas others in the medical setting were not. The discharge planning team incorporated the navigator and the KKN program approach into a successful plan for this patient, which contributed to timely discharge. The navigator followed through with his promises and helped the patient move into her new home and reconnect with her primary care facility. She has not returned to the hospital since graduation from KKN.

Lessons Learned

Timely follow-up with primary or specialty care after discharge is crucial to support healing outside of the hospital environment. Wide gaps exist in continuity of care from in-patient to outpatient care. Patients with significantly poor social determinants of health are extremely vulnerable within this time period. Several lessons were learned during the KKN program intervention relevant to these delays in care and how to resolve it.

One lesson is how poor linkages of patients to both community resources and health care often impede a healthy transition back into the community, putting patients at-risk for readmission. Patients are often discharged without an understanding of, or connection to, the appropriate services (including housing, transportation, and nutrition) that can properly reinforce their pathway to healing. Health care system barriers include challenges in communication, limited time with patients, complex medical language, and complex insurance systems dictating a patient's access to care. This can make it hard for a patient to sustain the health gains they make while in the inpatient setting.

The navigation team has seen all these barriers directly impact their patients' continuity of care after discharge. In particular, the navigators observed a lack of culturally-relevant approaches within health care settings, particularly for Native Hawaiian patients within inpatient acute care settings. Lack of cultural competence may impair successful engagement or gaining a patient's trust, which can compromise long-term behavioral change. Alternative approaches are needed because traditional primary care approaches (eg, appointment cards, phone reminders, brief appointments) may not be sufficient for patients living with severe mental illness, homelessness, and/or substance abuse problems.

Another lesson learned was that the navigator role expanded in scope over time. Navigators often went beyond following the discharge plan to address needs related to social determinants of health, such as helping homeless patients obtain housing and build skills for long-term success. For instance, the navigator in the first story worked with the family to build life skills (eg, grocery shopping, cooking). Although these activities were not the original intent of KKN, it was essential to engage the family in self-care to mitigate the risk of readmission and further health decline.

The group's effectiveness in supporting patients to address social determinants of heath created additional pressure to shift the focus of the group to serve Native Hawaiian patients at the highest risk for readmission with the most complex psy-

chosocial and/or medical needs. By January 2018, the KKN program was integrated as a permanent program at QMC and services were expanded to 13 additional medical units in order to capture those at greatest risk of readmission. To accommodate this shift, KKN adjusted their recruitment process to include a referral-based system in which patients at the highest risk for readmission were referred by hospital staff for navigation support. Given the intensity of each case and the amount of time necessary, the average caseload per navigator was eventually reduced from 16 to 10 patients. The importance of finding the right individuals to work as navigators proved to be critical for long-term sustainability, due to the high emotional and practical demands placed on these individuals.

Finally, readmission risk assessment and risk stratification in identifying social determinants prior to discharge can promote positive discharge planning and successful implementation of plans after discharge. Such processes can allow for patients who might need navigators to be offered to them during the hospital stay so trust can be built in this setting, as in the KKN model.

Discussion

The KKN program has offered relevant, culturally-sensitive care meeting a complex, personalized array of needs for more than 338 patients at QMC and has demonstrated successful outcomes, including sustainability. The goal of the project was to enhance Native Hawaiian health using a culturally-based model, encourage quality patient care, and positively impact lives. Both data and stories provide compelling evidence that the program is achieving its goals.

The project has many strengths, and some limitations. It was designed to meet a hospital's operational goals, not as a traditional research study. Thus, there are limitations in the data available for analysis. For instance, 30-day readmission is a relevant metric to health systems, and QMC has a system that calculates 30-day readmission rates by race/ethnicity, including Native Hawaiian. However, this data system is not able to identify KKN patients specifically. In order to track readmission rates for KKN patients during the first year of implementation, program staff used the data system available at QMC to identify all Native Hawaiian patients discharged from the 2 units each month. Staff then manually identified each KKN patient's record and separated the KKN patients from the Native Hawaiian patients who did not participate in the KKN program in order to calculate the monthly 30-day readmission rate for KKN patients (Figure 3). One of the limitations of the project is that staff are unable to provide a retroactive comparison of the readmission rates of the non-KKN Native Hawaiian patients with the readmission rates of the KKN patients. KKN patients make up over threefourths of the sample on the 2 medical units, therefore heavily influencing the trend of reduced readmissions for all other non-KKN Native Hawaiians. On the other hand, this trend line is relevant to QMC in which the intent of the program was to drive down overall Native Hawaiian readmissions and improve care for this population.

In addition, there are other factors that were not measured that may have impacted the reduction in readmission rate such as patient demographics, disease profiles, treatment course, and changes in medical technology or medication use. In this article, only 30-day readmission rates are discussed. However, with the expansion of the patient navigation program at QMC, additional evaluations are being conducted to determine the full impact to readmission, ED utilization, access to care, and cost.

Although scientific evidence around metrics like readmission rates is important, this is only part of the impact of the navigation team. The patient stories illustrate the true value of the program which includes helping patients heal even after they leave the hospital. The holistic model of aloha and the values of the founders of QMC are embedded in the infrastructure of KKN and at the root of the program's success.

Since January 2018, the KKN division is now included as part of the Queen's Care Coalition, which includes patient navigation for ED "super utilizers" and a CMS-funded division called My Connections, which serves Native Hawaiians and non-Native Hawaiians. These programs focus on navigation for patients who have high utilization of the ED or hospital, are at a high risk for readmission, or have screened positive for needs related to the social determinants of health. Additional staff have been added including 11 additional full-time patient community navigators and 4 full-time patient screeners.

Practical Implications

Many patients admitted to the hospital have social and behavioral needs that can prevent effective healing after discharge and lead to re-hospitalizations. In addition, hospital stays are often short and require that the patients are discharged to a safe environment which is not always available, particularly among patients with low household incomes or homelessness.

The literature includes reports of effective post-discharge initiatives that follow patients at home. These initiatives often rely on phone contact and often involve clinical staff who focus on physical healing. Although these programs can be quite useful for patients with a strong support system, they do not fit all patient needs. Particularly for patients who face multiple life stressors or are from Indigenous or marginalized communities, a more comprehensive, culturally-competent approach may be needed. This community navigation project demonstrates that assisting patients with their basic needs through a compassionate, culturally-based approach staffed by non-clinical community health workers (navigators) with clinical support can impact readmission rates in an acute care hospital.

Conflict of Interest

None of the authors identify a conclict of interest.

Acknowledgments

The authors wish to thank Gerard Akaka, Diane Paloma, Loraine Fleming, Naleen Andrade, and Gwen Isherwood for their invaluable support for the *Ke Ku'una Na'au* program.

Authors Affiliations:

- The Queen's Health Systems, Honolulu, HI (JK, LKN, JAK)
- The Queen's Medical Center, Honolulu, HI (LG, RL)
- Daniel K. Inouye College of Pharmacy, University of Hawai'i at Hilo, Hilo, HI (DT)
- Office of Public Health Studies, University of Hawai'i at Mānoa, Honolulu, HI (TS)

Correspondence to:

Jaclyn Kanilehua Kim MSW, LSW; Native Hawaiian Health, The Queen's Health Systems; 1301 Punchbowl Street, Honolulu, HI 96813; Email: jackim@queens.org

References

- LeppinAL, Gionfriddo MR, Kessler M, et al. Preventing 30-day hospital readmissions: a systematic review and meta-analysis of randomized trials. JAMA Intern Med. 2014;174(7):1095-107.
- Kripalani S, Theobald CN, Anctil B, Vasilevskis EE. Reducing hospital readmission: current strategies and future directions. *Annu Rev Med*. 2014;65:471–485.
- McHugh MD, Carthon JMPH, Kang XL. Medicare readmissions policies and racial and ethnic health disparities: a cautionary tale. Policy Polit Nurs Pract. 2010;11:309–316.
- Queen's Health Systems Native Hawaiian Health Program. The Queen's Health Systems Native Hawaiian Health Program Report. https://www.queens.org/media/file/QHS-Native-Hawaiian-Health-Report-2015.pdf. Accessed January 12, 2019.
- Queen's Medical Center Electronic Medical Record data analyses by Decision Support Services.
- King GL, McNeely MJ, Thorpe LE, et al. Understanding and addressing unique needs of diabetes in Asian Americans, Native Hawaiians, and Pacific Islanders. Diabetes Care. 2012;35:1181-8.
- Mau M, Sinclair K, Saito E, Baumhofer KN, Kaholokula JK. Cardiometabolic health disparities in Native Hawaiians and other Pacific Islanders. *Epidemiol Rev.* 2009;31,113-129.
- Sentell TL, Young MM, Vawer MD et al. Pathways to potentially preventable hospitalizations for diabetes and heart failure: patient perspectives. BMC Health Serv Res. 2016;16:300.
- Quensell M, Juarez DT, Seto TB, Braun K, Sentell TL. I need my own place to get better": patient perspectives on the role of housing in preventable hospitalizations for diabetes and congestive heart failure. J Health Care Poor Underserved. 2017;28:784-797.
- Calvillo-King L, Arnold D, Eubank KJ, et al. Impact of social factors on risk of readmission or mortality in pneumonia and heart failure: systematic review. J Gen Intern Med. 2013;28:269–282.
- Kwan BM, Rockwood A, Bandle B, Fernald D, Hamer MK, Capp R. Community health workers: addressing client objectives among frequent emergency department users. J Public Health Manag Pract. 2018;24:146–154.
- Phalen J, Paradis R. How community health workers can reinvent health care delivery in the US. Health Affairs Blog. DOI: 10.1377/hblog20150116.043851. Published January 16, 2015. Accessed January 12, 2019.
- Daniel H, Bornstein SS, Kane GC; Health and Public Policy Committee of the American College of Physicians. Addressing social determinants to improve patient care and promote health equity: an American College of Physicians position paper. Ann Intern Med. 2018;168(8):577-578.
- The Queen's Medical Center Data from EMR. Honolulu, Hawai'i. Population Explorer. June 2016.
- Bisognano, M, Boutwell, A. Improving Transitions to Reduce Readmissions. Front Health Serv Manage. 2009;25:3-10.